

REMARKS

Reconsideration of the application in view of the above amendments and the following remarks is requested. Claims 2-5, 8-10, 26, 33-36, and 45-55 are in this application. Claims 1, 6-7, 11-25, 27-32, and 37-44 have been cancelled. Claim 26 has been amended. Claims 2-5, 8-10, and 45-55 have been allowed.

Applicant requests the Examiner to indicate whether the drawings filed on June 22, 2004 (and received by the PTO on June 28, 2004) have been entered into the application. Applicant notes that in the next communication following receipt of the drawings, applicant is to be notified by the Examiner if the drawings have been entered and, if not entered, applicant should receive an explanation as to why the drawings were not entered. (See MPEP §608.02(h).)

The Examiner rejected claims 26 and 33-36 under 35 U.S.C. §102(e) as being unpatentable over Yamamoto (U.S. Patent No. 6,437,441). For the reasons set forth below, applicant respectfully traverses this rejection as applied to claim 26.

Claim 26, which was amended to clarify the invention, recites, in part,

“a first plurality of metal lines that lie in substantially a first horizontal plane, the first plurality of metal lines including first, second, and third metal lines formed on the layer of isolation material, the first, second, and third metal lines each having a top surface, a bottom surface, and side wall surfaces that contact the top and bottom surfaces;

“a first dielectric material, the first dielectric material being formed between the first and second metal lines so that the first dielectric material contacts the side wall surface of the first metal line at a point and extends horizontally from the point to contact the side wall surface of the second metal line, lying in a first region that lies horizontally entirely between the second and third metal lines so that the first dielectric material contacts the side wall surface of the second metal line, and contacting the top surfaces of the second and third metal lines, the first dielectric material not extending horizontally from any point on the side wall surface of the second metal line to contact the side wall surface of the third metal line.”

In rejecting the claims, the Examiner pointed to metal lines 18a, 18b, and 18c shown in, for example, FIG. 18A of Yamamoto as constituting the first, second, and third metal lines, respectively, required by claim 26. In addition, the Examiner pointed to dielectric material 28, which is also shown in FIG. 18A, as constituting the first dielectric material required by claim 26.

Dielectric material 28, however, can not be read to be the first dielectric layer. As noted above, the first dielectric layer of claim 26 must "contact the side wall surface of the first metal line." However, as shown in FIG. 18A of Yamamoto, dielectric material 28 does not contact the side wall surface of metal line 18a, but instead contacts dielectric film 26. Thus, since dielectric material 28 does not contact the side wall surface of metal line 18a, dielectric material 28 can not be read to be the first dielectric layer required by claim 26.

In addition, dielectric film 26 can not be read to be the first dielectric layer because, although dielectric film 26 contacts the side wall surface of the first metal line at a point, dielectric film 26 does not extend horizontally from the point to contact the side wall surface of the second metal line. As shown in FIG. 18A of Yamamoto, dielectric film 26 is a conformal layer that extends between adjacent metal lines 18 below the bottom surface of the metal lines 18. Thus, since dielectric film 26 does not extend horizontally to contact the second metal line from the point, dielectric film 26 can not be read to be the first dielectric layer.

Therefore, since dielectric material 28 and dielectric film 26 can not be read to be the first dielectric layer required by claim 26, claim 26 is not anticipated by Yamamoto. In addition, since claims 33-36 depend either directly or indirectly from claim 26, claims 33-36 are not anticipated by Yamamoto for the same reasons as claim 26.

Thus, for the foregoing reasons, it is submitted that all of the claims are in a condition for allowance. Therefore, the Examiner's early re-examination and reconsideration are requested.

Respectfully submitted,

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